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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,718	01/24/2002	Isao Karube	082369-000000US	2726
20350	7590	08/16/2005	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			BARTON, JEFFREY THOMAS	
			ART UNIT	PAPER NUMBER
			1753	

DATE MAILED: 08/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/914,718

Applicant(s)

KARUBE, ISAO

Examiner

Jeffrey T. Barton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8 and 9 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,3-6,8 and 9 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Response to Amendment***

1. The amendment filed on 22 June 2005 does not place the application in condition for allowance.

***Status of Objections and Rejections Pending Since the***

***Office Action of 15 November 2004***

2. All objections and rejections of claims 2 and 7 are obviated due to cancellation of the claims.
3. The objection to the specification as containing numerous errors is withdrawn due to Applicant's amendment. The Examiner thanks Applicant for the care that was obviously taken in amending the specification.
4. The objection to claims 1-8 due to confusing language is withdrawn due to Applicant's amendment,
5. The rejection of claims 1, 3-5, 7, and 8 under 35 U.S.C. §102(e) as anticipated by Anderson et al is withdrawn due to Applicant's amendment.
6. All other previous grounds of rejection are maintained.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1, 3-6, 8, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Wiktorowicz et al.

Regarding claims 1 and 8, Wiktorowicz et al disclose a method of two-dimensional separation using a two-dimensional separation device (Figures 3-5), comprising: conducting first dimensional separation of a sample through electrophoresis in a gel (Column 12, line 66 - Column 13, line 34 discloses gel; Column 14, lines 38-46 describes the first dimension separation); and conducting a second-dimensional separation of the substances separated in the first dimension through capillary electrophoresis (Column 14, lines 46-58; Column 6, lines 6-29 describes the channels, which can also accurately be called capillaries, given their dimensions); wherein said device comprises means for the first and second dimensional separations, comprising a plurality of capillaries (170) provided on a planar support. (Figures 3-5)

Regarding claim 5, in addition to the device associated with the method described above, Wiktorowicz et al disclose a voltage source that drives the electrophoretic separations. (Column 14, line 59 - Column 15, line 7 describe electric field application - a voltage source is necessary for this)

Regarding claim 3, Wiktorowicz et al disclose the analysis of proteins by their method. (Column 11, lines 19-29)

Regarding claims 4, 6, and 9, Wiktorowicz et al disclose the first dimension of separation being isoelectric focusing. (Column 15, lines 25-40)

9. Claims 1, 3-6, 8, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Ledley.

Regarding claims 1 and 8, Ledley discloses a method of two-dimensional separation using a two-dimensional separation device (Figures 1-3), comprising: conducting first dimensional separation of a sample through electrophoresis in a gel (Column 3, lines 60-68); and conducting a second-dimensional separation of the substances separated in the first dimension through capillary electrophoresis (Column 4, lines 1-8; Column 3, lines 18-45 and Figures 1-3 describe the channels, which can also accurately be called capillaries, given their dimensions); wherein said device comprises means for the first and second dimensional separations, comprising a plurality of capillaries provided on a planar support. (Figures 1-3)

Regarding claim 5, in addition to the device associated with the method described above, Ledley discloses a voltage source that drives the electrophoretic separations. (Column 3, line 60 - Column 4, line 8 - inherent in the procedure described)

Regarding claim 3, Ledley discloses the analysis of proteins by his method. (Column 3, lines 64-66)

Regarding claims 4, 6, and 9, Ledley discloses the first dimensional separation being isoelectric focusing. (Column 3, lines 54-59)

### ***Response to Arguments***

10. Applicant's arguments filed on 16 May 2005 have been fully considered but they are not persuasive.

In the Remarks section, at Page 8, 4<sup>th</sup> paragraph and Page 9, 1<sup>st</sup> full paragraph, Applicant states that neither Wiktorowicz et al nor Ledley specifically teaches a two-dimensional separation technique whereby one of the separation dimensions comprises a plurality of capillaries provided on a planar support. The Examiner disagrees. As described in the rejections above, both Wiktorowicz et al and Ledley disclose each and every limitation in the claims. As clearly shown in their figures, both use planar supports, with sealed grooves used to conduct the second dimension of electrophoresis. These grooves correspond to the term "capillaries", particularly in view of Applicant's disclosure on Page 11, line 13 - Page 12, line 31, which describe capillary channels of the same type used in the instantly claimed invention.

### ***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Jeffrey Barton, whose telephone number is (571) 272-1307. The examiner can normally be reached Monday-Friday from 8:30 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen, can be reached at (571) 272-1342. The fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

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JTB

12 August 2005

A handwritten signature in black ink, appearing to read "Alan Diamond", with a stylized flourish at the end.

**ALAN DIAMOND**  
**PRIMARY EXAMINER**

Tech Center 1700